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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,874	01/05/2001	Jun Liu	MSI-710US	4083
22801	7590	07/30/2004	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			KENDALL, CHUCK O	
			ART UNIT	PAPER NUMBER
			2122	

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/755,874	Applicant(s) LIU ET AL.	
	Examiner Chuck Kendall	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is the response to the communication received on May 12, 2004. Reconsideration of the instant application is requested by Applicant. All such supporting documentation has been placed of record in the file. Claims 1 – 27 are pending and claims 28 – 31 have been added.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Payne et al. (U.S. Patent Number 5,519,869) in view of Lerche (U.S. Patent Number 6,457,175).

In regard to Claim 1, Payne teaches identifying essential software within a device, the essential software including software necessary to operate the device (Column 4, lines 32-34); (b) identifying remaining portions of software within the device as non-essential software (Column 4, lines 40-42); (c) downloading new essential software from an external source to the device and storing the new essential software in memory (Column 6, lines 18-24 and Figure 4, item 46). Payne does not teach that essential software includes software necessary to provide external communications. Lerche, however, does teach a software image that allows a computer to boot including software to provide external communications (Column 3, lines 41-45).

Although Payne doesn't teach overwriting at least a portion of the non – essential software, Lerche does disclose this limitation see (4: 43 – 5:5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform the method of identifying essential software within a device, identifying non-essential software, and downloading new essential software from an external source to the device and storing the new essential software in memory, as taught by Payne, where essential software includes software necessary to provide external communications, as well as overwriting at least a portion of the non – essential software as taught by Lerche, since this allows the computer to be placed in a state that allows it to talk to a network, and hence fully functional in a corporate networked environment, and finally when saving essential software, overwriting at least a portion of the non-essential software, since in the case of limited memory, this would obviously provide enough room for the essential software to be installed.

In regard to Claim 2, Lerche teaches that after downloading the new essential software, attempting to operate the device and provide external communications using the new essential software (Column 9, lines 31-46).

In regard to Claim 3, Payne teaches that upon successfully operating the device and providing external communications, selectively downloading new non-essential software (Column 4, lines 6-11). Payne does not teach overwriting at least a portion of either the essential software or the non-essential software. Lerche, however, does teach overwriting old non-essential software when downloading new non-essential software (Figure 6A, item 110). Therefore, it would have been obvious to one of ordinary skill in

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the art at the time of the invention to selectively download new non-essential software, as taught by Payne, where, when storing the software, overwriting non-essential software, as taught by Lerche, since more updated software that performs better than old software usually replaces old software.

In regard to Claim 4, Payne teaches I/O Control Units (Figure 1, items 18-22), which allow a user to control the computer, and hence the computer is managed through these I/O units.

In regard to Claim 5, Lerche teaches the external source includes a server device (Figure 1, item 26).

In regard to Claim 6, Lerche teaches that the external source includes a network (Figure 1, item 32).

In regard to Claim 7, Lerche teaches that the network includes the Internet (Column 2, lines 38-40).

In regard to Claim 8, Lerche teaches that the essential software comprises an operating system and communications software (Column 4, lines 27-32).

Claims 9-16 are medium claims that correspond to method claims 1-8, respectively, and are rejected for the same reasons as Claim 1-8, respectively, where Lerche teaches a medium for carrying out said method of Claims 1-8 (Column 12, lines 50-62).

Claims 17-21 are apparatus Claims that correspond to method Claims 1-4 and 8, respectively, and are rejected for the same reasons as Claims 1-4 and 8, where Payne teaches an apparatus for carrying out said method of Claim 1-4 and 8 (Figure 1).

Claim 22 is a system claim that contains limitations that have already been addressed in the rejections of Claims 1, 5, and 6, and Claim 22 is rejected for the same reasons as these Claims, where Lerche teaches a system for carrying out said method of Claims 1, 5, and 6 (Figure 1).

Claims 23 -27 are system Claims that correspond to Claims 2 – 4, 7, and 8, respectively, and Claims 23-27 are rejected for the same reasons as these Claims, respectively, where Lerche teaches a system for carrying out said method of Claims 2-4, 7, and 8 (Figure 1).

Regarding Claims 28 - 31, Payne discloses all the claimed limitations as applied in claim 2. Payne doesn't explicitly disclose upon successfully operating the device or unsuccessfully providing external communication, reverting back to the essential software, although Payne does disclose restoring the original software which is now current (Payne, 5: 50 – 55). Lerche discloses in 4: 55 – 67, "The non-current application image may be a new application image that has been downloaded and stored in the EEPROM 44, but not as yet validated, or an old application image for which the current application image is a replacement... Upon successful validation of the "new" application image, the pointer 80 may then be switched to indicate the "new" application image as the current application image for execution in place of the "old" application image. Any further software upgrade downloads may then be written over the "old" application image, as the executability of the new software image will have been verified, and the danger of rendering the machine unbootable is reduced". Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to combine Payne and Lerche because, it would enable the system to be loaded and maintained more efficiently.

Response to Arguments

Applicant's arguments filed 05/12/2004 have been fully considered but they are not persuasive.

Argument (1), Applicant argues on page, 15 of Applicant's response dated May 12, 2004 for an improper combination of references, i.e. Payne and Lerche.

Response (1), Examiner believes the combination of references are infact valid for example, as noted, both Payne and Lerche deal with validating software in some capacity, as well as in a similar configuration. Payne and Lerche provide a scheme to validate a bootstrap image, see Payne (4:5) or bootrom image as indicated in Lerche see, FIG. 3, 68. As can be seen in the recited sections of Payne and Lerche, both Payne and Lerche are analogous and hence would suggest one to combine Payne and Lerche in order to implement Applicant's instant invention.

In the art, updating and restoring or maintaining the use of older or current software works hand in hand. For instance, an update need not take place if the older software is a better suited program and hence maintaining the older or previous program would be more efficient.

For example in Lerche, (3: 35 – 50);

"...a first of the software images is an image of software that has been validated and is known to be executable on the target machine. A second software image is only validated for execution after it is known to run successfully, and to perform at least one predetermined task (e.g., to establish communication with a network device following a reset). The first ("old") image is retained within the memory resource in case the second ("new") image fails to execute. The present invention is advantageous in that a software image that is known to be executable is always maintained within the memory resource, so that the target device is never placed in a situation in which it cannot boot. Specifically, in the case that the second "new" software image is unexecutable, for whatever reason, the target machine may always be booted from the first "old" software image."

As noted above, in recited paragraph from Lerche, Examiner believes the combination is proper since the use of "older/current" software and updates are dependent upon validity of the program.

Argument (2), Applicant argues that Prior art doesn't teach "overwriting at least a portion of non-essential software".

Response (2), Examiner believes that Prior art does teach this functionality. As can be seen in Lerch from the recited portion above and also in 4: 43 – 5:5. Here it shows that the non-essential (not validated) software is replaced (overwritten) by the validated software. Examiner understands this to be equivalent to Applicant's claimed limitation.

Argument (3), Applicant argues in claim 4, on page 17 of the response dated 5/12/2004, that Payne doesn't teach "the device being a managed device".

Response (3), Examiner believes that Payne's disclosure does disclose this limitation clearly. As seen in 5: 20 – 30, Payne discloses an I/O controller 18, 20, 22 which is seen to be connected to the IPL data, Examiner understands this to be equivalent to Applicant's claimed limitation in claim 4. Claim 4 merely recites the limitation of "the device being a managed device" and as such is taught by Payne.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 703-308 6608. The examiner can normally be reached on Mon-Fri 9:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK.



WEI Y. ZHEN
PRIMARY EXAMINER